

1. A method for assessing muscle damage in a subject, comprising[:  
obtaining a biological sample from a subject being assessed for muscle damage;]  
evaluating for the presence or absence of a myofilament protein modification  
product in [the] a biological sample obtained from a subject being assessed for muscle damage.

2. The method of claim 1, [further comprising the step of] wherein the evaluating  
step comprises assessing the amount of the myofilament protein modification product present in  
the biological sample, as an indication of the extent of muscle damage in the subject.

4. The method of claim 3, [further] comprising [the step of] assessing the amounts of  
said at least two different myofilament protein modification products present in the biological  
sample, and comparing the amounts as an indication of the extent of muscle damage in the  
subject.

7. The method of claim 6, [further] comprising [the step of] assessing the ratio of  
said at least two different myofilament protein modification products, as an indication of the  
extent of muscle damage in the subject.

8. The method of claim 1, wherein [the step of] evaluating for the presence or  
absence of a myofilament protein modification product comprises incubating the biological  
sample with a compound which specifically binds to the myofilament protein modification  
product, under conditions which allow the compound to form a complex with the myofilament  
protein modification product, and detecting the complex.

41. A method for assessing muscle damage in a subject, comprising:  
[obtaining a biological sample from a subject being assessed for muscle damage;]  
incubating [the] a biological sample obtained from a subject being assessed for  
muscle damage with at least one compound which specifically binds to one or more different  
myofilament proteins or myofilament protein modification products present in the sample, under  
conditions which allow the compound to form one or more complexes with the myofilament  
proteins or myofilament protein modification products;  
detecting said one or more complexes; and  
characterizing the profile of said one or more myofilament proteins or  
myofilament protein modification products contained in said one or more complexes, as an  
indication of the extent or type of muscle damage in the subject.